广西马蓝属(爵床科)一新种——阳朔马蓝

何开家 覃德海

(广西中医药研究所 南宁 530022)

Strobilanthes pseudocollina K. J. He & D. H. Qin, a new species of the Acanthaceae from Guangxi, China

HE Kai-Jia QIN De-Hai

(Guangxi Institute of Traditional Medical and Pharmaceutical Sciences, Nanning 530022, China)

Abstract *Strobilanthes pseudocollina* K. J. He & D. H. Qin, a new species of Acanthaceae from Guangxi, China, is described and illustrated. It is similar to *S. collina* Nees, but differs by leaf blade coriaceous, inflorescence glabrous, with a few flowers sparsely arranged. **Key words** *Strobilanthes, Strobilanthes pseudocollina* K. J. He & D. H. Qin, Acanthaceae,

Key words Strobilanthes, Strobilanthes pseudocollina K. J. He & D. H. Qin, Acanthaceae, new species, Guangxi, China.

摘要 描述了广西马蓝属*Strobilanthes*一新种,即阳朔马蓝*S. pseudocollina* K. J. He & D. H. Qin,并描绘了形态图。该新种与*S. collina* Nees近似,但以叶革质,花序无毛,花少且排列稀疏而不同。 关键词 马蓝属;阳朔马蓝;爵床科;新种;广西;中国

在整理广西中医药研究所收藏的爵床科Acanthaceae马蓝属Strobilanthes Bl.标本的过程中,发现采于广西阳朔县的一号标本——覃德海45996比较特殊,但该标本只有果实,没有花,我们遂再去原产地采集其花标本。经认真比较研究,确认该植物与该属的已知种类(Nees, 1832; Bremekamp, 1944; Wood, 1994, 1995; 方鼎等, 1997; 胡嘉琪, 2002; Bennett & Scotland, 2003; Wood & Scotland, 2003a, b; Wood et al., 2003; Deng et al, 2006)不同,是一新种。该新种分布于广西阳朔县石灰岩山地,生长在一座独立的小山上。新种植株零散分布于近山顶一带的疏林中,数量稀少。

阳朔马蓝 新种 图1

Strobilanthes pseudocollina K. J. He & D. H. Qin, sp. nov. Fig. 1

Proxima S. collinae Nees, sed foliis coriaceis, inflorescentiis glabris, floribus paucis et sparse dispositis differt.

Herba perennis, circ. 50 cm alta, ramosa. Caulis erectus interdum ascendens, teres, glaber, sparse rotundo-lenticellatus. Folia opposita, saepe leviter inaequalia, glabra; laminae tenuiter coriaceae usque coriaceae, anguste ovatae raro ovatae vel lanceolatae, 2.5–13 cm longae, 1.5–5.6 cm latae, apice acuminatae raro longe acuminatae, basi obtusae usque acutae saepe et leviter decurrentes, margine subintegrae vel sparse crenulatae, utrinque cystolithis densis praeditae, nervis lateralibus utrinsecus 4–8 cum costa utrinque prominulis; petioli 0.5–2.5 cm longi. Inflorescentia terminalis raro axillaris, 1–11 cm longa, spicata, 2–8-flora; pedunculus 0.3–2 cm longus, glaber; flores in axillis bractearum solitarii; bracteae oppositae, subspathulatae, 6–10 mm longae, 1.5–3 mm latae, 1-costatae, coriaceae, apice obtusae vel acutae, margine subintegrae et sparse ciliolatae, persistentes, utrinque cystolithis densis

²⁰⁰⁶⁻¹¹⁻¹⁴ 收稿, 2007-01-05 收修改稿。

基金项目: 国家自然科学基金(30370109)(Supported by the National Natural Science Foundation of China, Grant No. 30370109)。

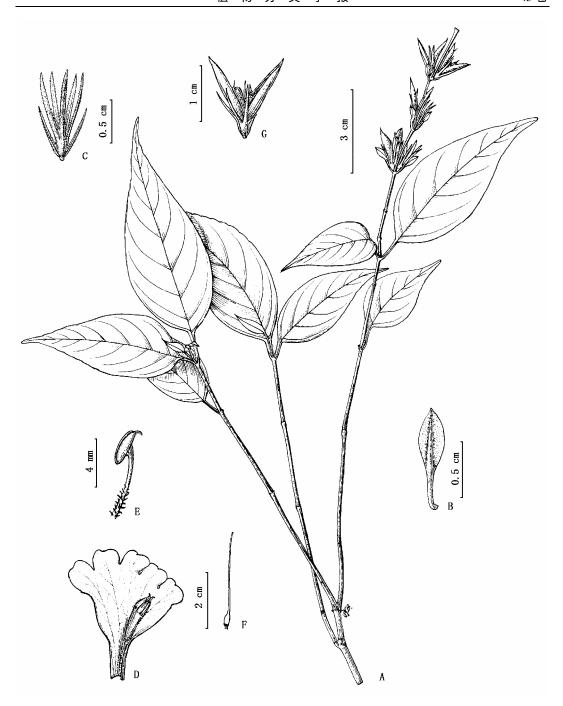


图1 阳朔马蓝 A, 果枝; B, 苞片; C, 花萼和小苞片; D, 花冠剖开示雄蕊; E, 雄蕊; F, 雌蕊; G, 蒴果。(孙英宝根据何开家等46001号标本(GXMI)绘)

Fig. 1. Strobilanthes pseudocollina K. J. He & D. H. Qin. A, fruiting branch; B, bract; C, calyx and bracteole; D, opened corolla showing stamens; E, stamen; F, pistil; G, capsule. Drawn by Y. B. Sun from K. J. He et al. 46001, GXMI.

praeditae, basi 1–2-jugae saepe steriles; bracteolae 2, lanceolatae, circ. 4 mm longae, circ. 0.6 mm latae, ciliolatae, utrinque cystolithis densis praeditae. Calyx 9–11 mm longus, 5-partitus, segmentis aequalibus lineari-lanceolatis 8–10 mm longis, circ. 1 mm latis ciliolatis utrinque cystolithis densis instructis. Corolla purpurea, 4.5 cm longa, tubo tubulari-infundibuliformi circ. 3.8 cm longa, extus glabra, intus bifariam pilosa, inferne cylindrica circ. 1 cm longa circ. 1.5 mm in diam., supra ampliata arcuata ore 11 mm in diam., lobis 5 suboblatis 7–8 mm longis 8.5–9 mm latis apice retusis inaequilateralibus. Stamina 4, didynama, inclusa, filamentis erectis longioribus 6 mm longis inferne sparse hirtellis, brevioribus circ. 3 mm longis glabris eis ad juncturas cum tubo corollae omnino hirtellis, antheris circ. 2.5 mm longis, connectivis ultra loculos dorso appendicibus circ. 0.5 mm longis ornatis, pollinis granis prolatis, 60–76 \times 36–44 μ m, P/E = 1.67, 3-colporatis, exosporio reticulato. Pistillum glabrum, ovario ellipsoideo 2 mm longo circ. 0.7 mm in diam., stylo cum stigmate circ. 3 cm longo. Capsula 10–15 mm longa, glabra. Semina 4, applanato-ovata, circ. 4 mm longa, circ. 2 mm lata, pilis brevibus hygroscopicis instructa. Fl. Sept.–Oct., fr. Oct.–Nov.

China. Guangxi (广西): Yangshuo (阳朔), limestone hill, in forests, alt. 150 m, 1986-11-28, *D. H. Qin* (覃德海) 45996 (frs. GXMI), 2002-10-23, *K. J. He et al.* (何开家等) 46001 (holotype, GXMI; isotype, PE).

多年生草本,高约50 cm,具分枝。茎直立有时上升,圆柱形,无毛,散生圆形皮孔。 叶对生, 常稍不等大, 无毛; 叶片薄革质至革质, 狭卵形, 稀卵形或披针形, 长2.5-13 cm, 宽1.5-5.6 cm, 顶端渐尖, 稀长渐尖, 基部钝至急尖, 常稍下延, 边缘近全缘或疏具细圆 齿, 两面密布钟乳体, 侧脉每边4-8条, 连同中脉在两面稍隆起; 叶柄长0.5-2.5 cm。穗状 花序顶生, 稀腋生, 长1-11 cm, 具花2-8朵, 花序梗长0.3-2 cm, 无毛; 苞片对生, 近匙 形, 长6-10 mm, 宽1.5-3 mm, 具1中脉, 革质, 先端钝或急尖, 边缘近全缘, 疏被睫毛, 宿存, 两面密被钟乳体, 小苞片2, 披针形, 长约4 mm, 宽约0.6 mm, 被小缘毛, 两面密 布钟乳体。花萼长9-11 mm, 5深裂, 裂片等大, 条状披针形, 长8-10 mm, 宽约1 mm, 边 缘被睫毛,两面密被钟乳体。花冠紫色,长4.5 cm,外面无毛,筒部筒状漏斗形,长约3.8 cm, 里面具两列支撑花柱的疏柔毛, 花冠管基部部分圆筒状, 长约1 cm, 直径约1.5 mm, 向上部逐渐扩大成阔的喇叭形,口部直径达11 mm; 花冠5裂, 裂片矩圆形, 长7-8 mm, 宽8.5-9 mm, 顶端微凹, 两侧不等大。雄蕊4, 2强, 内藏, 花丝直立, 长的一对长约6 mm, 下部散生小硬毛, 短的一对长约3 mm, 无毛, 花丝与花冠筒接合处被小硬毛, 花药长约 2.5 mm, 药隔凸出, 凸出部分长约0.5 mm; 花粉粒长球形, 大小为60-76×36-44 um, P/E=1.67, 3孔沟, 外壁具网状纹饰(图2)。雌蕊无毛, 子房椭圆形, 长约2 mm, 直径约0.7 mm, 花柱和柱头长约3 cm。蒴果长10-15 mm, 无毛。种子4, 扁卵形, 长约4 mm, 宽约2 mm, 具吸湿的短毛。花期9-10月, 果期10-11月。

本种与Strobilanthes collina Nees最接近,但叶革质,花序无毛,花少而排列稀疏,易于区别。

阳朔马蓝分布于广西桂林市阳朔县,该地为典型的喀斯特岩溶地貌,群峰林立。该植物生长于一座独立的石灰岩山上,山四周是农田和旱地,山上植被为次生阔叶林,较为茂密,阳朔马蓝零散分布于山的上部,生于灌木和杂草之间,生长状况尚好,能正常开花结果,但植株数量不多,应当加以有效保护。主要伴生植物有:石山巴豆*Crotoneuryphyllus* W. W. Smith.、红背山麻杆*Alchornea trewioides* (Benth.) Muell.-Arg.、龙须藤

Bauhinia championii (Benth.) Benth.、藤金合欢Acacia sinuata (Lour.) Merr.、类芦Neyraudia reynaudiana (Kunth) Keng ex Hitchc.、大白茅Imperata cylindrica P. Beauv. var. major (Ness) C. E. Hubb.等。



图2 扫描电镜下的阳朔马蓝花粉形态 Fig. 2. Pollen grain of Strobilanthes pseudocollina under SEM.

致谢 中国科学院华南植物园(IBSC)邓云飞博士和郝振萍女士帮助花粉扫描并提供照片,中国科学院植物研究所孙英宝先生绘图,在此一并致谢。

参考文献

Bennett J R, Scotland R W. 2003. A revision of *Strobilanthes* (Acanthaceae) in Java. Kew Bulletin 58: 1–81. Bremekamp C E B. 1944. Materials for a monograph of the Strobilanthinae (Acanthaceae) Verhandelingen der Nederlandsche Akademie van wetensch-appen, Afdeeling Naluurkunde. Tweede sectie, Deel 41: 1–306.

Deng Y F, Wood J R I, Scotland R W. 2006. New and reassessed species of *Strobilanthes* (Acanthaceae) in the Flora of China. Botanical Journal of Linnaean Society 150: 369–390.

Fang D (方鼎), Luo X-R (罗献瑞), Tang H-T (唐恢天). 1997. New materials for Acanthaceae from Guangxi. Guihaia (广西植物) 17: 23–59.

Hu C-C (胡嘉琪). 2002. Acanthaceae In: Flora Reipublicae Popularis Sinicae (中国植物志). Beijing: Science Press. 70: 1–309.

Nees von Esenbeck C G 1832. Acanthaceae Indiae Orientalis. In: Wallich N. Plantae Asiaticae Rariores. London: Treuttel & Würtz. 3: 70–117.

Wood J R I. 1994. Notes relating to the flora of Bhutan: 29 Acanthaceae, with special reference to *Strobilanthes*. Edinburgh Journal Botany 51: 175–274.

Wood J R I. 1995. Notes on Strobilanthes (Acanthaceae) for the Flora of Ceylon. Kew Bulletin 50: 1-24.

Wood J R I, Scotland R W. 2003a. The 2-lipped species of *Strobilanthes* (Acanthaceae). Kew Bulletin 58: 83–129.

Wood J R I, Bennett J R, Scotland R W. 2003. Notes on *Strobilanthes*: the Sympagis group. Kew Bulletin 58: 131–173.

Wood J R I, Scotland R W. 2003b. Strobilanthes: panicled species from East Asia. Kew Bulletin 58: 679-702.